

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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GARY S. ROUBIN, GEOFFREY HAMILTON WHITE,  
SRIRAM S. IYER, RUSSELL J. REDMOND, and CLAUDE A. VIDAL  
Junior Party  
(Patent Nos. 5,827,321, 6,475,236 and 6,106,548)<sup>1</sup>

v.

PAUL H. BURMEISTER, CHARLES L. EUTENEUER,  
BRIAN J. BROWN, PAUL J. FORDENBACHER, and  
ANTHONY C. VRBA  
Senior Party  
(Application 09/427,291)<sup>2</sup>

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Patent Interference No. 105,794  
(Technology Center 3700)

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Before: JAMESON LEE, SALLY GARDNER LANE and SALLY C. MEDLEY,  
*Administrative Patent Judges.*

LEE, *Administrative Patent Judge.*

**Judgment – Merits – Bd. R. 127**

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<sup>1</sup> The real party in interest is Endosystems, LLC.

<sup>2</sup> The real party in interest is Boston Scientific Scimed, Inc.

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Roubin v. Burmeister

1           Junior party Roubin has not filed a preliminary statement. Junior party  
2   Roubin has not attacked the accorded benefit dates of Senior Party Burmeister.  
3   Junior party has indicated that it will not be filing a priority motion. Junior party  
4   Roubin recognizes that it has in essence conceded priority. (Paper 26).

5           In a separate concurrent paper, we have denied junior party Roubin's Motion  
6   1 to designate certain claims as not corresponding to the count. No other motion is  
7   pending before the Board. Time is now appropriate to enter judgment against the  
8   junior party. It is

9           **ORDERED** that judgment as to the subject matter of Count 1 is herein  
10   entered against junior party GARY S. ROUBIN, GEOFFREY HAMILTON  
11   WHITE, SRIRAM S. IYER, RUSSEL J. REDMOND, and CLAUDE A. VIDAL;

12           **FURTHER ORDERED** that junior party GARY S. ROUBIN, GEOFFREY  
13   HAMILTON WHITE, SRIRAM S. IYER, RUSSEL J. REDMOND, and CLAUDE  
14   A. VIDAL is not entitled to claims 1-54 of Patent 5,827,321, claims 1-25 of Patent  
15   6,475,236, and claims 1-12 of Patent 6,106,548, which correspond to Count 1;

16           **FURTHER ORDERED** that claims 1-54 of Patent 5,827,321, claims 1-25  
17   of Patent 6,475,236, and claims 1-12 of Patent 6,106,548 are herein cancelled;

18           **FURTHER ORDERED** that if there is a settlement agreement, the parties  
19   should note the requirements of 35 U.S.C. § 135(c) and 37 CFR § 1.666; and

20           **FURTHER ORDERED** that a copy of this judgment be filed in the  
21   respective involved application or patents of the parties.

22  
23

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By Electronic Transmission:

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GARY S. ROUBIN, GEOFFREY HAMILTON WHITE,  
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ANTHONY C. VRBA  
Senior Party  
(Application 09/427,291)

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Patent Interference No. 105,794 (JL)  
(Technology Center 3700)

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Before LEE, LANE, and MEDLEY, *Administrative Patent Judges*.

LEE, *Administrative Patent Judge*.

**Decision -- Motions -- Bd. R. 125(a)**

- 1        This interference was declared on February 7, 2011. The sole authorized
- 2        motion is Roubin's Motion 1 which seeks to designate the following claims of
- 3        Roubin's involved patents as not corresponding to the count:

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Patent 5,827,321: claims 8, 10-12, 16-19, and 21-54

Patent 6,475,236: claims 1-25

Patent 6,106,548: claims 1-12

Burmeister filed no opposition to Roubin's Motion 1. Nevertheless, for

failure to meet Roubin's applicable burden of proof, Roubin's Motion 1 is *denied*.

## Findings of Fact

1. Junior party Roubin is involved in this interference on the basis of three patents: Patent 5,827,321 (Roubin '321); Patent 6,475,236 (Roubin '236); and Patent 6,106,548 (Roubin '548).

2. Senior party Burmeister is involved in this interference on the basis of Application 09/427,291, filed October 26, 1999.

3. Roubin's real party in interest is Endosystems, LLC.

4. Burmeister's real party in interest is Boston Scientific Scimed, Inc.

5. The sole count in this interference is Count 1, which is defined as:

Claim 1 of Roubin's Patent 5,827,321

or

Claim 22 of Burmeister's Application 09/427,291

6. Claim 1 of Roubin's Patent 5,827,321 reads as follows:

1. A stent comprising:

a plurality of annular elements, each annular element having a compressed state and an expanded state, wherein each annular element has a longitudinal dimension which is smaller in the radially expanded state than in the compressed state; and

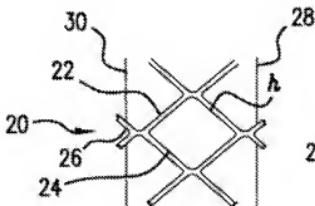
connecting members connecting adjacent annular elements:

1                   wherein the annular elements and connecting members are  
2                   made of Nitinol, with each connecting member preset with an  
3                   elasticity which causes the connecting member to elongate  
4                   longitudinally when the annular elements are in their expanded state  
5                   to compensate for the smaller longitudinal dimension of the annular  
6                   elements in the expanded state.

7

8                   Roubin '321

9   7.   According to Roubin '321, the effectiveness of pre-existing stent designs is  
10   critically affected by proper placement within a body vessel, and positioning is  
11   affected by the change in the stents' longitudinal length from the compressed to  
12   the expanded state due to foreshortening of the stent members. (Roubin '321  
13   1:32-52). A foreshortening prior art stent, as illustrated by Figs. 1A and 1B from  
14   Roubin '321, is depicted below:



15

FIG.1A  
PRIOR ART

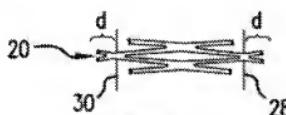
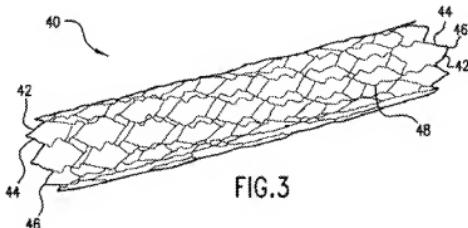


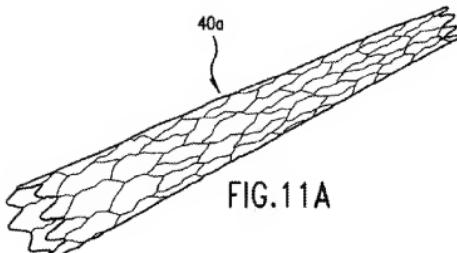
FIG.1B  
PRIOR ART

16   8.   The Specification of Roubin '321 also identifies that positioning within a  
17   body vessel is not only affected by foreshortening, but may also be affected by  
18   unique vessel shapes as certain body vessels experience a change in vessel lumen  
19   diameter due to anatomy or disease. (Roubin '321 2:6-56).

1 9. Roubin '321 discloses an expandable stent, and an expandable stent with a  
2 tapered diameter, illustrated respectively in Figures 3 and 11A, reproduced  
3 below:



4



5

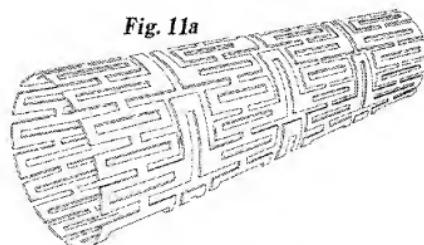
6 10. In Roubin '321 the preferred embodiment of a non-foreshortening  
7 intraluminal stent is made up of a plurality of annular elements and connecting  
8 members, wherein the connecting members vary in length to compensate for the  
9 foreshortening of the annular elements. (Roubin '321 2:66-3:16).  
10 11. Roubin's Motion 1 discusses the following references as applicable prior  
11 art: Burmeister's WO 95/31945 publication (Burmeister WO); Jang's Patent

12

1 5,954,743 (Jang '743); Goicoechea's Patent 5,609,627 (Goicoechea  
2 '627); and Fischell's Patent 5,749,825 (Fischell '825).

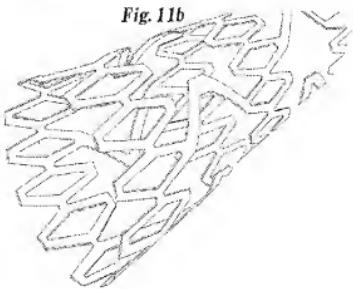
3 Burmeister WO  
4 12. Burmeister WO discloses an expandable stent having annular elements  
5 with connecting members that compensate for the foreshortening of expanded  
6 annular elements (Burmeister WO 12:11-25), as illustrated in Figures 11a  
7 (compressed state) & 11b (expanded state) reproduced below:

Fig. 11a

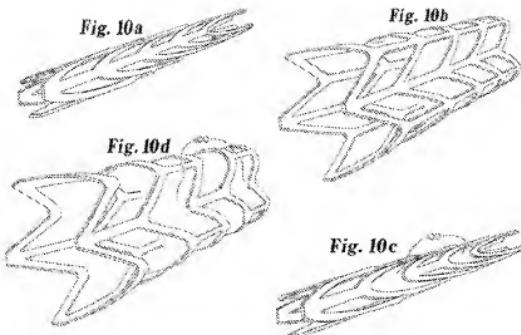


8

Fig. 11b



9  
10 13. Burmeister WO discloses improving flexibility by omitting connecting  
11 members. Omitted connecting members 100 are labeled in Figures 10a and 10b,  
12 depicted below. (Burmeister WO 12:11-25).

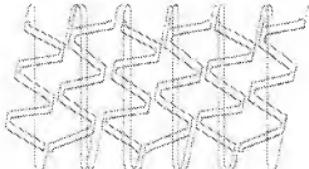


1  
2 14. Burmeister WO discloses stents having open and closed configurations.  
3 With an open configuration corresponding to a stent with omitted connecting  
4 members, and a closed configuration corresponding to a stent with all connecting  
5 members. Figures 10a and 10b, depicted above, represent stents in a closed  
6 configuration, and figures 10c and 10d, depicted above, represent stents in an  
7 open configuration. (Burmeister WO 12:11-25).  
8 15. Burmeister WO discloses expandable stents having spaces between alternating  
9 struts that form a spiral pattern. Figures 8a and 8b are illustrated below:

*Fig. 8a*



*Fig. 8b*



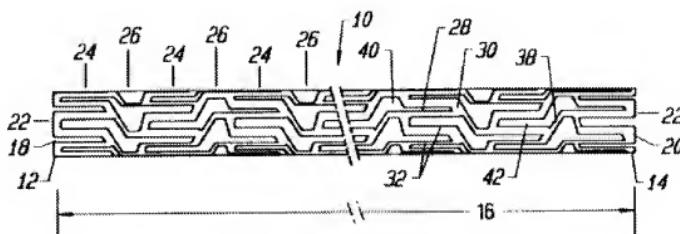
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Jang '743

4 16. Jang '743 discloses an expandable stent having expansion struts 28,  
5 connecting struts 38, and joining struts 30, (Jang '743 4:66-5:54), as shown in  
6 Fig. 1A.



*FIG. 1A*

7

8 17. Jang '743 discloses an expandable stent that has substantially constant  
9 unexpanded and expanded longitudinal lengths. (Jang '743 7:52-54).  
10 18. Jang '743 discloses an expandable stent wherein the foreshortening of  
11 struts 28 during expansion is countered by the longitudinal lengthening of

1 connecting struts 38, as depicted below in Figs. 3A and 3B (Jang '743 7:42-54):

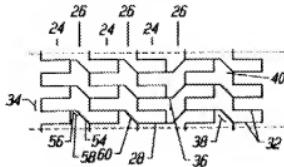


FIG. 3A

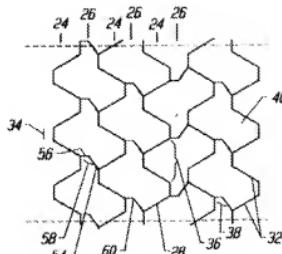


FIG. 3B

2  
3 19. Also, Jang '743 discloses several ways to achieve a tapered expanded  
4 stent, one of which involves removing progressively larger portions of the  
5 expansion struts 28 to remove corresponding ones of segments 72, 74, 76,  
6 78, 80, 82, and 84 shown in Figure 5 (Jang '743 9:9-10:38):

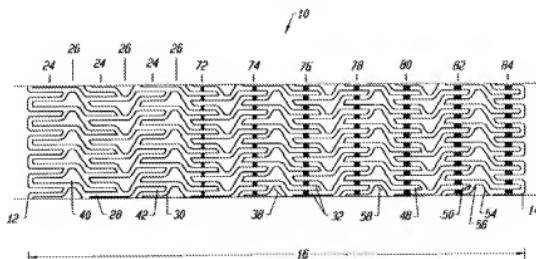


FIG. 5

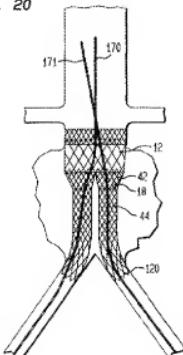
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Goicoechea '627

20. Goicoechea '627 discloses a bifurcated stent that has segments with  
different diameters (12, 44) and segments that are tapered (14, 18). (Goicoechea  
'627 8:50-63). See Fig. 20 depicted below:

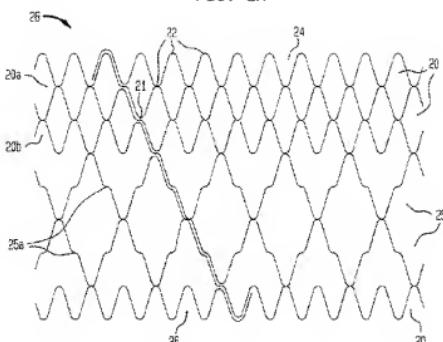
FIG. 20



5

6 21. Goicoechea '627 discloses a stent made of Nitinol having a plurality of single  
7 hoops 20 of unit width and intermediate hoops 25 of twice unit width, which are  
8 connected by securing means made of Nitinol elements or polypropylene filaments.  
9 (Goicoechea '627 9:1-61). See Fig. 2A reproduced below:

FIG. 2A



1  
2 22. Goicoechea '627 discloses a stent with intermediate hoops 25 having a  
3 plurality of offsets 25a that are created when Nitinol wire is wound around pins  
4 instead of creating single hoops 20. (*Id.*).  
5 23. Intermediate hoops 25 are formed by omitting single hoops 20, which leave  
6 apices 22 unconnected where the stent transitions from intermediate hoops 25 to  
7 single hoops 20. (*Id.*).  
8 24. Intermediate hoops 25 are the size of four single hoops 20, and formed by  
9 omitting two single hoops 20 connected at their apices 22. (*Id.*).  
10 Fischell '825  
11 25. Fischell '825 discloses dual diameter stents to accommodate a non-uniform  
12 diameter vessel (Fischell '825 5:31-46), as illustrated in Fig. 5 reproduced below:

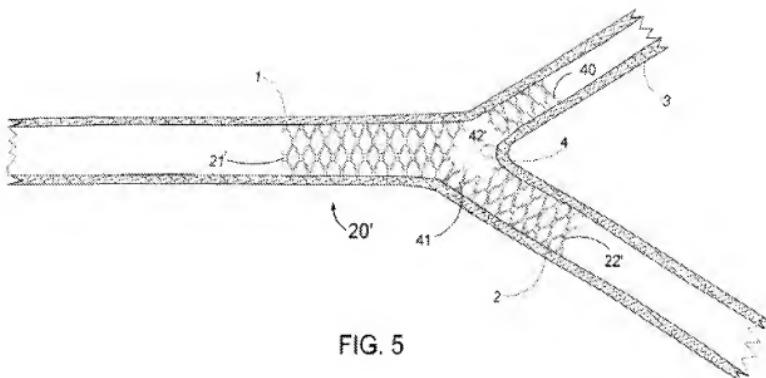


FIG. 5

26. Fischell '825 teaches creating an opening to allow unobstructed blood flow by  
not connecting alternating struts and apices. (Fischell '825 1:43-67; 4:31-41).

## Analysis

5 Roubin's Motion 1 seeks to designate claims 8, 10-12, 16-19, and 21-54 of  
6 Roubin '321, claims 1-25 of Roubin '236, and claims 1-12 of Roubin '548 as not  
7 corresponding to the count. Roubin as the moving party bears the burden of  
8 proof to establish entitlement to the relief requested. 37 C.F.R. § 41.121(b). A  
9 claim corresponds to a count if the subject matter of the count, treated as prior art  
10 to the claim, would have anticipated or rendered obvious the subject matter of the  
11 claim. 37 C.F.R. § 41.207(b)(2).

12 It is evident that the count, if treated as prior art, would not have  
13 anticipated any of the Roubin claims which the motion seeks to designate as not  
14 corresponding to the count. Thus, the proper analysis is one of obviousness per  
15 *Graham v. John Deere Co.*, 383 U.S. 1 (1966). The pertinent factual inquiries are

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1 (1) the scope and content of the prior art, (2) the differences between the claimed  
2 invention and the prior art, (3) the level of ordinary skill in the art, and (4) any  
3 objective evidence of nonobviousness. *Id.* at 17. One cannot show non-  
4 obviousness by attacking references individually where the rejections are based  
5 on combinations of references. *In re Keller*, 642 F.2d 413, 426 (CCPA 1981).

6       Also, a person of ordinary skill in the art has ordinary creativity and is not  
7 an automaton. *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 421 (2007). If a  
8 technique has been used to improve one device, and a person of ordinary skill in  
9 the art would recognize that it would improve similar devices in the same way,  
10 using the technique is obvious unless its actual application is beyond his or her  
11 skill. *KSR Int'l Co.*, 550 U.S at 417.

12       Roubin has to demonstrate by a preponderance of the evidence that each of  
13 the claims it seeks to designate as not corresponding to the count would not have  
14 been obvious to one with ordinary skill in the art, given the subject matter of the  
15 count as prior art and any other applicable prior art. In that regard, Roubin  
16 identifies many differences between the claims and the count.

17       For all of the reasons discussed below, Roubin has not satisfied its burden  
18 of proof that the collective differences between each claim it seeks to designate as  
19 not corresponding to the count and the subject matter of the count are such that  
20 the claim would not have been obvious over the count.

21       At the outset, it is noted that the Board had given notice to Roubin that it  
22 may not in its motion to designate claims as not corresponding to the count  
23 restrict its analysis to only the prior art of record in either party's involved  
24 application or patent but must address the level of ordinary skill in the art as well

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1 as that prior art otherwise known to Roubin. (Paper 26). In its Motion 1, Roubin  
2 discusses only the prior art of record and makes no representation that it is  
3 unaware of any prior art which discloses the various features it alleges is missing  
4 from the subject matter of the count. It cannot be assumed that the prior art of  
5 record is the closest prior art for the features identified by Roubin as not present  
6 within the count or that Roubin is not aware of other prior art disclosing such  
7 features. For that reason alone, Roubin's Motion 1 motion is inadequate.

8 Additional deficiencies of Roubin's Motion 1 are discussed below.

9 A. Varying Diameter in the Expanded State

10 For claims 16-18, 23-25, and 51-53 of Patent 5,827,321, claims 1-25 of  
11 Patent 6,475,236, and claims 3, 4, and 8-12 of Patent 6,106,548, Roubin correctly  
12 points out that each claim requires a stent in the expanded state having two or  
13 more segments along its length, with each segment assuming a different diameter  
14 in the expanded state. The count has no such requirement and we refer to it as the  
15 varying-diameter feature.

16 With regard to the varying diameter feature, Roubin specifically discusses  
17 four prior art references identified in the prosecution history of Burmeister's  
18 involved application and asserts that none makes up for the missing varying-  
19 diameter feature: (1) Burmeister WO, (2) Jang '743, (3) Goicoechea '627, and  
20 (4) Fischell '825.

21 With regard to Burmeister WO, we agree with Roubin that it does not  
22 disclose a stent having multiple segments with different diameters. It neither  
23 teaches nor suggests the varying-diameter feature. With regard to the other three  
24 prior art references in combination with the subject matter of the count as prior

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1 art, however, Roubin's arguments are misplaced.

2 Roubin asserts merely that implementing the varying-diameter feature  
3 disclosed in each of Jang '743, Goicoechea '627, and Fischell '825 within the  
4 subject matter of the count raises design considerations for one with ordinary skill  
5 and makes it more difficult than it would be otherwise. But Roubin nowhere  
6 asserts and the evidence does not support that implementing the varying-diameter  
7 feature within the subject matter of the count would have been beyond the skill of  
8 one with ordinary skill. Note that the subject matter of the count is treated as  
9 prior art and Roubin acknowledges Jang '743, Goicoechea '627, and Fischell  
10 '825 as prior art.

11 Each of Jang '743, Fischell '825, and Goicoechea '627 discloses a stent  
12 including the varying-diameter feature. It would have been at least *prima facie*  
13 obvious to one with ordinary skill in the art to include such a known feature into a  
14 stent according to the count treated as prior art. Roubin can rebut the *prima facie*  
15 case of obviousness by making a showing that the combination would have been  
16 so technically complex that it could not have been accomplished by one with  
17 ordinary skill in the art and that one with ordinary skill in the art would not have  
18 expected to successfully complete the combination. However, Roubin makes no  
19 such assertion, much less submit evidence sufficient to demonstrate the same.

20 That implementing the varying-diameter feature of Jang '743, Goicoechea  
21 '627, or Fischell '825 in the subject matter of the count would involve design  
22 considerations is certainly expected. That should be the beginning of Roubin's  
23 analysis, not the end. A person of ordinary skill in the art is presumed to have  
24 skills apart from what the prior art references explicitly say. *KSR Int'l Co.*, 550

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1 U.S. at 418. One with ordinary skill in the art is a person of ordinary creativity  
2 and is not an automaton. *Id.* at 421. Roubin has not asserted, much less  
3 established, that the task of implementing the varying-diameter feature in  
4 combination with the subject matter of the count would have been beyond the  
5 level of ordinary skill in the art to accomplish and could not have been achieved  
6 by one with ordinary skill in the art. Stopping short at stating that there will be  
7 design considerations to contemplate seriously undermines Roubin's analysis.

8 Moreover, Jang '743 discloses expansion and connecting struts that  
9 correspond to the count's annular elements and connecting members, (Jang '743  
10 7:32-8:12). Jang '743 also discloses various methods to vary the diameter of  
11 different segments of an expanded stent, which include changing the stiffness of  
12 struts, using a tapered balloon to expand a non-tapered stent, employing  
13 reinforced expansion struts; and removing portions of the expansion struts. (Jang  
14 '743 9:10 to 10:38). One with ordinary skill in the art would have known to  
15 include in its implementation effort at least the various methods disclosed in Jang  
16 '743 which reflect the level of ordinary skill in the art.

17 B. Same Aperture Geometry/Different Aperture Size

18 For claims 21-32 of Patent 5,827,321, Roubin correctly points out that each  
19 claim recites a stent with a first and a second segment wherein the apertures of the  
20 first and second segments have different sizes but "substantially the same  
21 geometric configuration" when the first and second segments are in the expanded  
22 state. The count has no such requirement and we refer to it as the substantially-  
23 the-same-geometry feature.

24 Based on that feature, Roubin seeks to designate claims 21-32 of Roubin

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1 '321 as not corresponding to the count. In its argument, Roubin specifically  
2 discusses Goicoechea '627, and asserts that it does not disclose apertures that  
3 have different sizes but substantially the same geometric configuration in the  
4 expanded state. We disagree.

5 Goicoechea '627 discloses apertures of different sizes but substantially the  
6 same geometry as depicted in Fig. 2A shown above. Hoops 20 and 25 have  
7 substantially the same geometric shape while hoop 20 has a unit width of one and  
8 hoop 25 has a unit width of two. (Goicoechea '627 9:20-61). Hoops 20 and 25  
9 are connected by securing means of Nitinol loops, creating annular elements  
10 connected by connecting members. (*Id.*).

11 While it is true that large hoops 25 have perimeters which include a small  
12 slightly undulating portion on each side due to the particular manner of  
13 construction and the small hoops 20 do not, it cannot be reasonably disputed that  
14 the overall contours of the small and large hoops are "substantially the same."  
15 The substantially-the-same geometry feature requires not identity of configuration  
16 but only substantial sameness. Roubin gives no satisfactory explanation on why  
17 the shapes of hoops 20 and 25 are not "substantially the same" as is claimed.

18 Even if the shapes of hoops 20 and 25 are considered not to be substantially  
19 the same, it is not explained why one with ordinary skill in the art would not have  
20 recognized from the disclosure of Goicoechea '627 that the contours of hoops 20  
21 and 25 can be made substantially the same. In particular, Roubin cites no portion  
22 of Goicoechea '627 which indicates that larger hoops 25 must be made with the  
23 small slightly undulating portion on each side.

24

1           Roubin further argues that the apertures shown in Goicoechea '627 are not  
2 of the same type as the ones recited in the count because in Goicoechea there are  
3 no connecting members connecting adjacent annular elements. The argument is  
4 without merit. The annular elements in Goicoechea '627 are the hoops 20 and 25,  
5 and adjacent members of the hoops are connected in a number of different ways  
6 such as Nitinol loops, rings, or staples. (Goicoechea '627 9:53-61). Roubin's  
7 argument is also misplaced because one cannot show non-obviousness by  
8 attacking references individually where the issue involves a combination of  
9 references. *In re Keller*, 642 F.2d 413, 426(CCPA 1981). Here, the count itself is  
10 treated as prior art and Roubin does not adequately explain why the hoops of  
11 Goicoechea cannot be connected as recited in the count.

12           C.    Annular Element in an Open Configuration

13           For claims 8, 32, and 38-58 of Roubin '321, Roubin correctly points out  
14 each claim requires a stent having at least one annular element in an open  
15 configuration, *i.e.*, that the plurality of alternating struts and apices which define  
16 an annular element are not connected in at least one location. (Motion 11:4-8).  
17 The count has no such requirement and we refer to it as the open-element feature.

18           Roubin argues that based on the open-element feature alone, the claims  
19 would not have been obvious to one having ordinary skill in the art over the  
20 count. (*Id.* 13:13-19). Roubin discusses three references identified in the  
21 prosecution history of Burmeister's involved application and asserts that none  
22 makes up for the identified difference between the claims and the count treated as  
23 prior art: (1) Burmeister WO, (2) Goicoechea '627, and (3) Fischell '825.  
24 Roubin asserts that each of the references, individually, does not teach the open-

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1 element feature as required by the claims. The argument is misplaced  
2 Roubin cannot show non-obviousness by attacking references individually  
3 where the issue is based on a combination of prior art. *See In re Keller*, 642 F.2d  
4 at 426. It cannot be ignored that the count is also treated as prior art. Also, a  
5 person of ordinary skill is presumed to have skills apart from what the references  
6 explicitly say. *KSR Int'l Co.*, 550 U.S. at 418. One with ordinary skill is also a  
7 person of ordinary creativity and is not an automaton. *Id.* at 421.

8 Roubin acknowledges that Burmeister WO discloses omitting connecting  
9 members to render a stent flexible for articulation. (Motion 11:29-12:1). Roubin  
10 also acknowledges that Fischell '825 shows a stent with a plurality of integrally  
11 connected struts which define annular elements with an open portion 42' between  
12 portions of the stent 21', 22'. (*Id.* 12:29-13:6). Roubin does not adequately  
13 explain why one with ordinary skill would not have known, in light of Burmeister  
14 WO or Fischell '825, to omit in the subject matter of the count a connecting  
15 member or a portion of a stent thus satisfying the open-element feature.

16 Furthermore, Goicoechea '627 discloses an expandable stent having  
17 intermediate hoops created by omitting an annular element, *e.g.*, a single hoop,  
18 leaving unconnected apices in an open configuration. (Goicoechea '627 9:20-33).  
19 Roubin has not adequately explained why one with ordinary skill would not have  
20 known, in light of Goicoechea '627, to omit in the subject matter of the count all  
21 or a portion of an annular element thus leaving at least one annular element  
22 unconnected at one location thus satisfying the open-element feature.

23  
24

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1           D.    Gaps by Omitting Struts

2           For claims 35-37 of Patent 5,827,321, Roubin correctly points out that each  
3 of these claims recites a stent having a plurality of gaps formed by omitting at  
4 least one of the struts. The count has no such requirement and we refer to it as the  
5 gap feature.

6           Roubin specifically discusses three prior art references: (1) Burmeister  
7 WO, (2) Fischell '825, and (3) Goicoechea '627. Roubin alleges that none of the  
8 three references teaches including the gap feature in subject matter of the count.  
9 The argument is misplaced.

10          Roubin cannot show non-obviousness by attacking references individually  
11 where the issue is based on a combination of prior art. *In re Keller*, 642 F.2d at  
12 426. Here, it cannot be ignored that the count is also treated as prior art. Also, a  
13 person of ordinary skill in the art is presumed to have skills apart from what the  
14 prior art references explicitly say. *KSR Int'l Co.*, 550 U.S. at 418. One with  
15 ordinary skill in the art is also a person of ordinary creativity and is not an  
16 automaton. *Id.* at 421.

17          While Burmeister WO does not suggest removing a strut, Roubin  
18 acknowledges that Burmeister WO discloses omitting connecting members to  
19 render a stent flexible. (Motion 11:29-12:1). Burmeister WO discloses omitting  
20 connecting members to create a gap. (Burmeister WO 12:11-16). Fischell '825's  
21 Figure 5 discloses a gap in the expandable stent by omitting struts. (Fischell '825  
22 4:31-41). Goicoechea '627 discloses offsets created by omitting a hoop to form a  
23 gap. (Goicoechea '627 9:20-33). Thus, each of Burmeister WO, Fischell '825,  
24 and Goicoechea '627 discloses a stent including the gap feature.

1           Roubin has not adequately explained why in light of Burmeister WO,  
2 Fischell '825, and Goicoechea '627, one with ordinary skill in the art would not  
3 have known to form the gap feature within the subject matter of the count.

4           E.    Consistent Length between Expanded and Compressed States

5           For claim 7 of Patent 6,475,236, Roubin correctly points out that the claim  
6 recites a stent wherein the length is consistently maintained throughout expansion  
7 of the stent from the compressed state. The count has no such requirement and  
8 we refer to it as the consistent-length feature.

9           Roubin argues that one of ordinary skill in the art would not have expected  
10 that a stent according to the count would necessarily consistently maintain the  
11 length of the stent from the compressed to the expanded state. (Motion 15:11-  
12 15). The argument is misplaced. The issue is not whether a stent according to the  
13 count would necessarily include the consistent-length feature, but whether the  
14 consistent-length feature would have been obvious to one with ordinary skill  
15 when the count is treated as prior art.

16           Roubin further argues that even if Jang '743 did teach a stent with reduced  
17 foreshortening, the design would not have suggested the consistent-length feature.  
18 (*Id.* 15:27-32). The argument lacks underlying analysis and is unpersuasive.

19           Jang '743 teaches an expandable stent that has a substantially constant  
20 unexpanded and expanded longitudinal length to help alleviate the foreshortening  
21 of a stent from the compressed to the expanded state. (Jang '743 7:42-54; 9:10-  
22 65). It would have been at least *prima facie* obvious to one with ordinary skill in  
23 the art that if the stent in its compressed and expanded states has substantially the  
24 same length, then it likely has substantially the same length during the transition

1 from the compressed to the expanded state. Moreover, Jang '743 does not  
2 disclose a substantially different stent length during the transition. That  
3 implementing the consistent-length feature of Jang '743 in the subject matter of  
4 the count would involve design considerations is expected. That should be the  
5 beginning of Roubin's analysis and not the end. A person of ordinary skill in the  
6 art is presumed to have skills apart from what the prior art references explicitly  
7 say. *KSR Int'l Co.* 550 U.S. at 418. One with ordinary skill in the art is also a  
8 person of ordinary creativity and is not an automaton. *Id.* at 421. Roubin has not  
9 asserted, much less established, that the task of implementing the consistent-  
10 length feature in combination with the count would have been beyond the level of  
11 ordinary skill in the art to accomplish and could not have been achieved by one  
12 with ordinary skill in the art.

13       F.     Spiral Pattern of Omitted Connecting Members or Struts

14       Claim 34 refers to omitting connecting members of an expandable stent  
15 with a plurality of segments, with the omitted connecting members forming a  
16 spiral pattern on the stent. Claim 37 similarly refers to omitting struts of the stent,  
17 with the omitted struts forming a spiral pattern on the stent. We refer to the  
18 limitation in claim 34 and the limitation in claim 37 as the spiral-pattern-omission  
19 feature.

20       With regard to the spiral pattern feature, Roubin specifically discusses only  
21 Burmeister WO and Goicoechea '627. We agree with Roubin that the subject  
22 matter of the count in combination with either Burmeister WO or Goicoechea  
23 '627 would not have reasonably suggested the spiral-pattern-omission feature.

24       However, Roubin still has not met its burden of proof by a preponderance

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1 of the evidence. The hypothetical person of ordinary skill in the art is not aware  
2 of not just Burmeister WO and Goicoechea '627. We recognize that Roubin  
3 cannot be presumed to have been aware of every item of prior art as would the  
4 hypothetical person of ordinary skill in the art. But it must account for prior art  
5 which it is aware. With respect to the spiral-pattern-omission feature, if Roubin is  
6 aware of no closer prior art than Burmeister WO and Goicoechea '627, its simply  
7 stating so may suffice. There is no such representation in Roubin's Motion 1.

8 Roubin apparently responds only to arguments made in Burmeister's  
9 suggestion for interference, rather than establishes independently, as it should,  
10 that the claims are patentably distinct from the count. That seriously undermines  
11 the motion for which Roubin bears the burden of proof.

12 As is already noted above, the Board had given explicit notice to Roubin  
13 that it may not restrict its analysis to only the prior art of record in either party's  
14 involved application or patent but must address the level of ordinary skill in the  
15 art as well as that prior art otherwise known to Roubin. (Paper 26). Roubin  
16 makes no representation that it is unaware of any prior art which discloses the  
17 spiral-pattern-omission feature.

18 G. Biocompatible Graft Covering

19 For claim 19 of Roubin '321, Roubin correctly notes that it comprises a  
20 stent according to the count in combination with a biocompatible graft covering.

21

22 The only disclosure of the biocompatible graft covering in Roubin's  
23 specification is reproduced in its entirety below (Roubin '321 5:15-18):

24 The stent may also be coated with coverings of PTFE, dacron, or

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1       other biocompatible materials to form a combined stent-graft  
2       prosthesis.  
3

4       In arguing that implementing the biocompatible graft covering in  
5       combination with the count would not have been obvious to one of ordinary skill  
6       in the art, Roubin specifically discusses only one reference - Goicoechea '627.  
7       Roubin asserts that implementing the covering feature raises "additional,  
8       independent design considerations . . . because of the function of the connecting  
9       members." (Motion 18:21-24).

10       Goicoechea '627 discloses a biocompatible graft covering in combination  
11       with an expandable stent. (Goicoechea '627 10:30-39). The count discloses an  
12       expandable stent having connecting members preset with an elasticity to elongate  
13       longitudinally to compensate for smaller longitudinal dimensions of expanded  
14       annular elements. Notwithstanding the connecting elements with a preset  
15       elasticity in the expandable stent of the count, there is at least a *prima facie* case  
16       of obviousness for one with ordinary skill in the art to implement the  
17       biocompatible graft covering in the expandable stent of the count. After all, the  
18       stent is for use within the body and Goicoechea clearly discloses the desirability  
19       of using a biocompatible graft covering on such a stent.

20       That implementing the biocompatible-graft feature in combination with the  
21       subject matter of the count would involve design considerations is expected. But  
22       that should be the beginning of Roubin's analysis, not the end. A person of  
23       ordinary skill in the art is presumed to have skills apart from what the prior art  
24       references explicitly say. *KSR Int'l Co.* 550 U.S. at 418. One with ordinary skill  
25       in the art is also a person of ordinary creativity, and not an automaton. *Id.* at 421.

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1 Roubin has not asserted, much less established, that implementing the  
2 biocompatible-graft feature in the subject matter of the count would have been  
3 beyond the level of ordinary skill in the art or unachievable by one with ordinary  
4 skill in the art. Roubin also has not asserted or demonstrated that one with  
5 ordinary skill would not have expected a successful implementation.

6 Furthermore, claim 19 depends from claim 1 which serves as an alternative  
7 in the count. Roubin points to nothing in its own disclosure which constitutes a  
8 special way of implementing the biocompatible graft covering on a stent  
9 including elongating connecting members to compensate for foreshortening.  
10 That is a further indication that the implementation is within the level of ordinary  
11 skill in the art.

12 H. Same Length in the Expanded State and Compressed State

13 For claims 1-8, 12, 17, 20, 22, and 25 of Roubin '236, Roubin correctly  
14 notes that these claims recite a stent having segments with varying diameter in  
15 the expanded state while the length of the stent remains the same in both the  
16 expanded and compressed states. (Motion 19:13-23). Roubin correctly notes  
17 that this feature requires a stent to have no foreshortening between the  
18 compressed and expanded states. (*Id.*). The count has no such requirement and  
19 we refer to it as the same-length feature.

20 Roubin argues that one of ordinary skill in the art would not have thought  
21 to implement a stent wherein the length of the stent is the same in the expanded  
22 and the compressed state, and further argues that the same-length feature would  
23 not have been obvious in view of the count. (Motion 19:13-25).

24 The argument is unpersuasive.

1           Jang '743 teaches an expandable stent that has a substantially constant  
2   unexpanded and expanded longitudinal length to help alleviate the foreshortening  
3   of a stent from the compressed to the expanded state. (Jang '743 7:42-54; 9:10-  
4   65). It would have been at least *prima facie* obvious to one with ordinary skill in  
5   the art to include that desirable feature within the subject matter of the count.  
6   Roubin can rebut the *prima facie* case of obviousness by making a showing that  
7   the combination would have been so technically complex that it would have been  
8   beyond the level of ordinary skill to implement and that one with ordinary skill in  
9   the art would not have expected to successfully complete the implementation.  
10   However, Roubin has made no such showing.

11           That implementing the same-length feature of Jang '743 in the subject  
12   matter of the count would have involved design considerations is expected. That  
13   should be the beginning of Roubin's analysis, not the end. A person of ordinary  
14   skill in the art is presumed to have skills apart from what the prior art references  
15   explicitly say. *KSR Int'l Co.* 550 U.S. at 418. One with ordinary skill in the art  
16   is also a person of ordinary creativity, and not an automaton. *Id.* at 421. Roubin  
17   has not asserted, much less established, that the task of implementing the same-  
18   length feature in combination with the subject matter of the count would not have  
19   been achievable by one with ordinary skill in the art.

20           I.     First Segment having a Plurality of  
21                   Combined Adjacent Cells that Impart Greater  
22                   Flexibility to the First Segment than the Second Segment

23           For claims 1-7 of Patent 6,106,548, Roubin correctly points out that they  
24   recite a stent having a first segment with a plurality of combined adjacent cells

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- 1 that impart greater flexibility to the first segment than to the second segment.
- 2 (Motion 19:28-20:1). The count has no such requirement and we refer to it as the
- 3 flexible-segment feature.

4 Roubin discusses Figures 11a and 11b of Burmeister WO (Motion 20:3-  
5 13) but not that part of Burmeister WO teaching that connecting members are  
6 removed from portions of the stent to form segments of different flexibility.  
7 (Burmeister WO 12:11-16; Figures 10a-10d). Thus, Roubin’s argument about  
8 Burmeister WO is unpersuasive. Roubin also cannot show non-obviousness by  
9 attacking references individually where the matter is based on a combination of  
10 prior art. *In re Keller*, 642 F.2d at 426. Here, the count is regarded as prior art.  
11 Also, Goicoechea ‘627 discloses an expandable stent having a segment formed of  
12 small hoops of unit width and a segment of intermediate hoops of twice unit  
13 width. (Goicoechea ‘627 9:20-33). The latter has more flexibility and each  
14 intermediate hoop has four adjacent small hoop cells. (*Id.*). Roubin’s not  
15 discussing Goicoechea’s disclosure in connection with the flexible-segment  
16 feature also renders its argument unpersuasive.

## Conclusion

18 For all of the foregoing reasons, and considering collectively all of the  
19 differences Roubin has identified for each claim with respect to the subject matter  
20 of the count, Roubin has not satisfied its burden of proof in showing that it is  
21 entitled to the relief requested, *i.e.*, to have claims 8, 10-12, 16-19, and 21-54 of  
22 Roubin '321, claims 1-25 of Roubin '236, and claims 1-12 of Roubin '548  
23 designated as not corresponding to the count.

24 Roubin's Motion 1 is denied.

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